

Notice of Allowability

Application No.

10/691,151

Examiner

Albert W. Paladini

Applicant(s)

DUONG, ANTHONY T.

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on 10/21/03.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance: None of the references cited or the art searched disclose or teach alone or in combination the method of determining a simultaneous switching allowance by calculating a first scaling from a first expected parameter of a digital system and a first assumed parameter, where the scaling factor is defined in the specification as a function of the assumed PWB board inductance and the expected PWB board inductance, which is explained in the specification, accounts for board parasitics, IC socket parasitics, and load capacitance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Relevant Prior Art

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DeRosa (5160922) discloses a system for limiting the number of simultaneously switching outputs of an integrated circuit chip at or below a predetermined limit for the chip during a short, predetermined time window, comprising means for arbitrating, according to the simultaneous switching output limit of the chip.

Vakirtzis (5477460) discloses a system and method for the analysis of switching systems, where the simultaneous switching limit is half of the driver output voltage swing and includes a factor, which considers the effects of hysteresis.

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Yao (5838204) discloses a phase lock looped circuit whose design takes into consideration that the conventional ASIC includes certain rules often called SSO rules to determine an upper current limit on the total simultaneous switching current of output buffers near a power pad (or pin) or a ground pad (or pin). The upper current limit is defined as an SSO current limit. If the summation of output buffer currents exceeds the SSO current limit, the conventional ASIC circuit needs additional power and ground pins. Accordingly, a larger current typically relates to a use of additional power and ground pins.

Kernahan (6864644) discloses a method of tuning a drive circuit for a cold cathode fluorescent lamp, where the design considers that simultaneous switching output (SSO) requirements may limit the number of FETS that may be switched at any given time. Accordingly, regulation control module may schedule the various pulse rising and falling edges to satisfy such objectives using an edge scheduler.

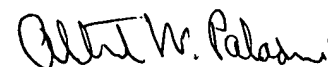
Alani (7043670) discloses a system and method of reducing the effect of simultaneous switching noise, where considerable amount of effort is invested in simultaneous switching output (SSO) analysis for each type of buffer in order to determine the maximum number of simultaneously switching buffers allowed to be connected via a common drain VDD or source VSS to the associated external power or ground pins. The number of switching buffers connected to a common drain.

3. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (571) 272-3748. The examiner can normally be reached from 7:00 to 3:00 PM on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (571) 272-3749. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

July 11, 2006



Albert W. Paladini
Primary Examiner
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